UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Mr. (b) (6)
(b)
Scarboro, West Virginia 25917

OCT 23 1992

Re: Sample data review

Dear (b) (6)

On June 26, 1992 you submitted a package of information which included a sample analytical report from Virginia Polytechnic Institute and State University. The May 8, 1992 report summarized the results of samples you collected on July 14, 1991. Upon receipt of your package I contacted the university's Service Training and Environmental Progress (STEP) Coordinator and requested additional analytical information in an attempt to validate the data in the report. The analytical review (attached) indicates (based on the information provided by you and the lab) that the results could not be validated and that they should only be considered estimates at best. Therefore, EPA is unable to draw any conclusions on the data reported.

To ensure that we have all the pertinent information before a final decision is made, I ask that you provide me with the following information:

- a statement correlating your sample number and description with the sample numbers and concentrations reported by the lab. When did you send the samples to the lab? Did you send all the samples you took on July 14, 1991 it the lab? How were they packaged and how big of a sample did you collect? Are the samples that do not indicate a depth of sample included in the description surface samples? Please identify the location of the three unlabeled (Frank Mansfield) samples on the site sketch.

- and, a detailed description of how each sample was taken, including the type of sample equipment used (i.e. jars, spoons, soil augers, shovels, etc.). Was the same sample collection equipment used for obtaining each sample? How did you clean your equipment between samples? Do you still have the equipment you used?

Upon receipt of the above information I will conduct a final review of your data and provide you with a copy of the findings. If you have any questions or require additional information about the review of your data, you can call me at (215)597-7915 or write to me (mail code (3HW30)) at the above address.

Sincerely,

Stephen Jarvela
On-Scene Coordinator

ORIGINAL (Red)

WESTON 5 Underwood Court, Delran, NJ 08075 609-461-4003

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036

MEMORANDUM

TO: Steve Jarvela, Senior OSC, EPA Region III
Superfund Removal Branch

THRU: (b) (4) TATL, Region III 9/29/92 TDD #9209-31
PCS #2659

FROM: (b) (4) TAT Region III mcm

SUBJECT: Shafer Electric Site Samples Analytical Review

DATE: September 29, 1992

This report covers the review of the Analytical Data package for the twelve (12) soil samples and three (3) tree bark samples collected at the Shafer Electric Site on July 14, 1991. There was a cover letter from Jennifer L. Herbst of the Service Training for Environmental Progress at the Virginia Polytechnic Institute and State University accompanying the results, however, who collected the samples is not clear. The samples were delivered to the Pesticide Residue Research Laboratory at Virginia Tech on October 13, 1991. The analyses performed were PCBs on both the soil and bark samples. The handwritten sample descriptions and sampling map do not match, neither do the sample numbers of the reported results.

ANALYTICAL METHODOLOGY

No analytical method was listed with the reported results.

- No chain-of-custody records was submitted by the laboratory in the analytical report.
- The holding time of 14 days for the soil samples was exceeded. There is no established holding time for tree bark.
- There was no extraction log provided.
- The samples were analyzed in April of 1992, six months after sample receipt.

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- The calibration curves for most days did not meet calibration criteria of a correlation coefficient of >0.995

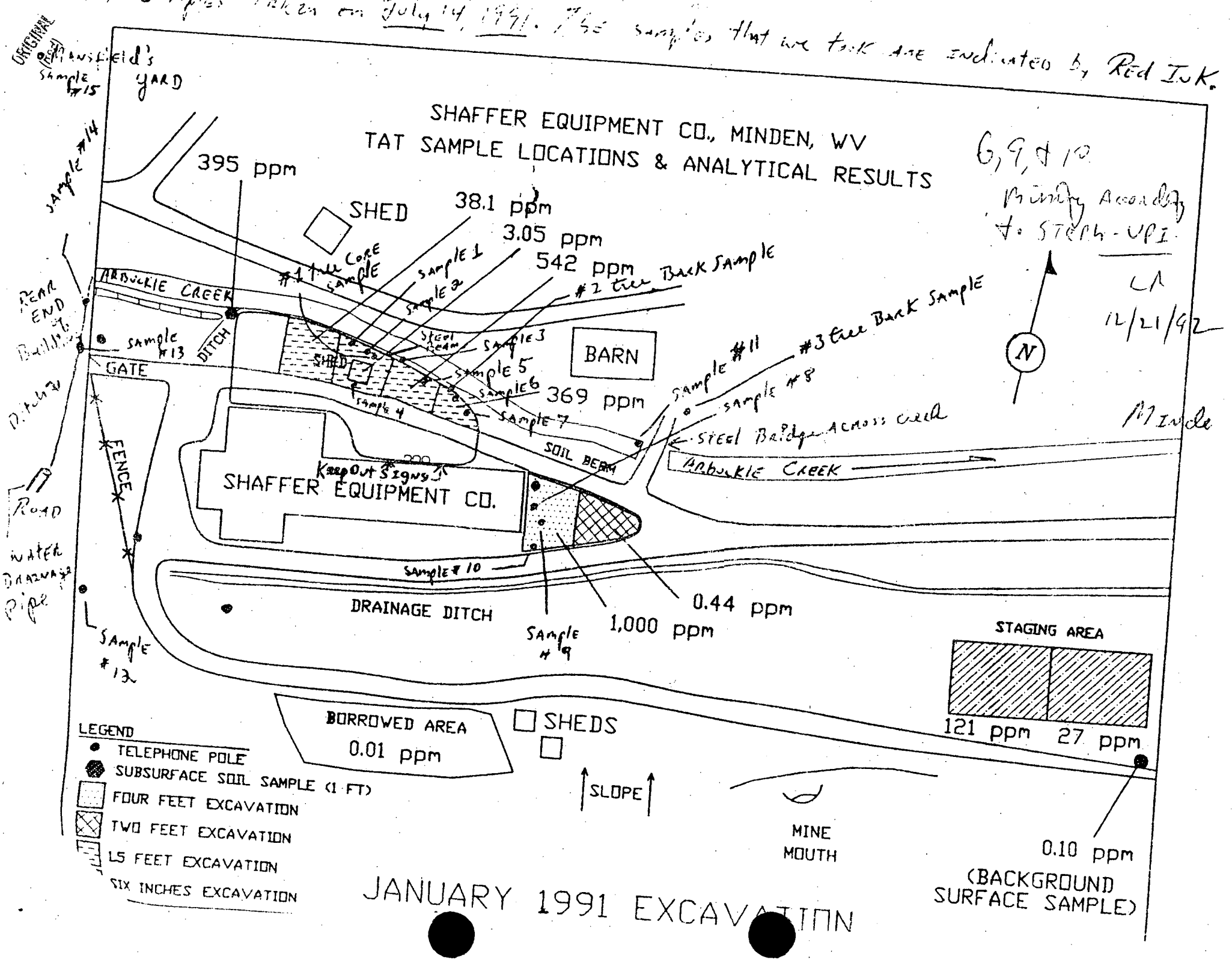
- There were not matrix spikes or matrix spike duplicate analyses performed, therefore no precision or accuracy can be determined.

- There appear to be no surrogate spikes added to each sample before extraction. The extraction efficiency can not be determined.

CONCLUSION

The data should be accepted as estimates at best, since holding times for soils were exceeded, no precision or accuracy could be determined, calibration data did not meet criteria and extraction efficiency can not be determined.

MM/mr



Samples taken on July 14, 1991. The samples that were took are indicated by Red Ink.

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PESTICIDE RESIDUE RESEARCH LABORATORY
VA TECH
352 LITTON REAVES HALL
BLACKSBURG, VIRGINIA 24061-0309

ENTRY: 088

DATE: May 8, 1992

FOR:

ADDRESS: Wes Geertsema
STEHP Program
Environmental Engineering
Norris Hall
Va Tech

DATE RECEIVED: October 13, 1991

DESCRIPTION OF SAMPLE: Soil and Tree Bark

DETERMINATIONS:

1. Soil	(#1)	.758 ppm	1260 PCB
2. Soil	(#2)	3.276 ppm	1260 PCB
3. Soil	(#4)	2.712 ppm	1260 PCB
4. Soil	(#5)	92.420 ppm	1260 PCB
5. Soil	(#7)	56.658 ppm	1260 PCB
6. Soil	(#8)	2.754 ppm	1260 PCB
7. Soil	(#11)	2.763 ppm	1260 PCB
8. Soil	(#12)	40.515 ppm	1260 PCB
9. Soil	(#13)	166.164 ppm	1248 and 1260 PCB
10. Soil	(#21)	0.490 ppm	1260 PCB
11. Soil	(#22)	34.307 ppm	1260 PCB
12. Soil	(#23)	1.093 ppm	1260 PCB
13. Tree Bark	(#24)	Less than 0.2 ppm	PCB
14. Tree Bark	(#25)	Less than 0.2 ppm	PCB
15. Tree Bark	(#26)	Less than 0.2 ppm	PCB

6, 9, 10 MEMOS

David Ruggio (DAVID RUGGIO LAB SPEC A)

PROFESSOR R.W. YOUNG, DIRECTOR
PESTICIDE RESIDUE RESEARCH LABORATORY

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iptive Analysis of the July 14, 1991 Soil, Sediment, vD Tree Bark Samples taken at the Shaffer Site Minden, WV.

15 samples - soil & sediment

6, 9, 10 missing according to STEPH - USE - Perhaps Peyton in Shipment

(1) 10 feet up from Shed (along burm) towards Rear-end gate - 6" down

(2) Behind Burnt out Shed, along Burm - 6"-8" down

(3) 2' Below Steel Beam - Sediment of Arbuckle Creek

(4) On front of Shed - EPA "RED FLAG" - 6-8" deep

(5) Directly behind the 3 transformers 17' from the first Keep Out sign to the Burm of Arbuckle Creek

(6) 13' directly across from the SECOND Keep out Sign - 6-8" deep

(7) 15' across from 2nd Keep Out Sign to Burm -> the 9' towards front of Building - 8" deep

(8) front of Building - 8' north of telephone pole - 4' from wall 12" deep

(9) front of Building - 14' north of telephone pole 8' from wall

(10) 7' from edge of building (front) completely down from the telephone pole

(11) Sediment Sample 10' above Steel Cross Bridge towards Back of Shaffer Building & Rear Gate SAND BAR (12" deep) AND Sediment

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July 14, 1991 Samples –

Rear End of Building Sampling (3) samples

(12) 14' across from fence – facing the open Road 23' below the 2nd telephone pole next to the fence = 8" deep

(13) 16' in ditch (drainage) from drainage pipe towards Arbuckle Creek 12" deep

(14) 40' in ditch from drainage pipe towards Arbuckle Creek 12" deep

3 Tree Bark Samples

(1) Big Maple – cut 2" into tree Bark – directly Behind the Burnt Out

(2) Directly across from 2nd Keep-out sign – Maple Tree

(3) Poplar Tree – 10' across from Steel walk Bridge